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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,620	07/06/2000	Patrick H. Hayes	81230.55US1	6836
34018	7590	06/13/2005	EXAMINER	
GREENBERG TRAURIG, LLP 77 WEST WACKER DRIVE SUITE 2500 CHICAGO, IL 60601-1732			LESPERANCE, JEAN E	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/611,620	<b>Applicant(s)</b> HAYES ET AL.	
	<b>Examiner</b> Jean E Lesperance	<b>Art Unit</b> 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 49-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 49-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

### **DETAILED ACTION**

1. The amendment filed April 1, 2005 is entered and claims 49 to 75 are pending.

### ***Drawings***

2. This application has been filed with informal drawings which are acceptable for Claim examination purposes only. Formal drawings will be required when the application is allowed.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 49-72 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In independent claims 49, 52 and 57 and dependent claims, the limitations "while the keys are being concurrently activated" and "one or more times measured between activations of the keys" are not described anywhere in the specification. Correction is required.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 49-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In independent claims 49, 52 and 57 and dependent claims, the limitations "while the keys are being concurrently activated" and one or more times measured between activations of the keys" are indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. What does the applicant means by concurrently activated and one or more times measured between activations of the keys? Correction is required.

For the purpose of this Office action, the examiner assumes that: the claimed limitation "while the keys are being concurrently activated" is read as when a user presses one of the function keys 230, microcontroller 220 receives the key activation in processing block 415; and the claimed limitation "one or more times measured between activations of the keys" is read as a "Menu" selection is provided by the PN 200, which allows the user to activate the menu hierarchy from the top. In this way, the user can go all the way back to the beginning and begin a new sequence of function selections and submenu displays.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 49, 50, 52, 53, 55-63, 65-67 and 70-75 are rejected under 35 USC 102

(e) as being unpatentable over US Patent # 6,040,829 ("Croy et al.').

As per claims 49 and 52 and 57, Croy et al. teach a remote device Fig.3A (200) which includes a plurality of function keys Fig.3A (310 and 311) corresponding to a plurality of keys including navigation keys that are activatable to transmit command codes for commanding the consumer electronic device to navigate a menu of a digital media playable on the consumer electronic device; the microcontroller Fig.2 (220) performs a lookup to determine (monitor) the current mode and status corresponding to the depressed key using internal tables stored in memory 222 corresponding to storage means for monitoring activations of the keys and as user viewing and selection habits change, the PN 200 adapts itself to the user automatically by tracking current user selection (column 8, lines 22-24) corresponding to for automatically storing a sequence of activations of the keys including the navigation keys when used to transmit command codes to navigate the menu of the digital media; and a menu selection is provided by the PN 200, which allows the user to activate the menu hierarchy from the top. In this way, the user can go all the way back to the beginning and begin a new sequence of function selections and submenu display (column 7, lines 62-67) and Once a user has performed the selection process, such as the selection of a particular personal preference, one single time and named the sequence of

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selections, e.g., MUSIC, the user may simply press "Recall" and "MUSIC" to receive a list of programs that meet these particular qualifiers according to the preselected user preferences (column 18, lines 41-47) corresponding to means for repeating or executing the stored sequence of activations of the keys to thereby cause a retransmission of command codes corresponding to those activations of the keys that are within the store sequence; remote interface 138 may be a conventional infrared (IR) link with a corresponding interface transmitter/receiver 210 within remote device 200 corresponding to a transmitter providing communication with the consumer electronic device in response to activation of at least one of the keys.

As for claims 50, 53, 61 and 63, Croy et al. teach a marked program may be selected and additional information requested or programmed into the VCR. Additionally, a delete softkey allows removal of the marked program from the list if it is not of interest anymore. Marked programs of the past may be automatically deleted (column 19, lines 23-28) corresponding to means for removing activations of non navigation keys from the stored sequence and wherein the instructions further provide for commanding the consumer electronic device to display primary material provided on the removable medium.

As for claim 55, Croy et al. teach once a user has performed the selection process, such as the selection of a particular personal preference, one single time and named the sequence of selections, e.g., MUSIC, the user may simply press "Recall" and "MUSIC" to receive a list of programs that meet these particular qualifiers according to the preselected user preferences (column 18, lines 41-47) corresponding to wherein

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the means for executing a subset of the sequence is responsive to activation of a single key.

As for claim 56, Croy et al. teach a back function Key (Fig. 3A) that can be activated by the user to navigate corresponding to the single key is predetermined and wherein activation of a single key allows a user to execute the stored sequence.

As for claim 58 and 59, Croy et al. teach the memory in the PN 200 is limited, so only a certain amount of information (program data and additional information related to the programs) can be stored in the PN 200. Most people do not regularly watch all television channels, but use only, say ten channels, for example. In this case, the PN 200 may store additional information on the transmissions of these ten often viewed channels and less information on the other channels that are seldom viewed (column 8, lines 14-21) corresponding to wherein the user activations of the keys commands the consumer electronic device to navigate the secondary material to a desired screen and executing the stored sequence commands the consumer electronic device to again navigate to the desired screen and wherein executing the stored sequence commands the consumer electronic device to display each screen that was displayed when the sequence of user activations was sensed.

As for claims 60 and 62, Croy et al. teach The PN 200 includes a selection for invoking a "Back" function, which causes the PN 200 to redisplay a previous submenu. In this manner, the user may "undo" a current selection by using the "Back" selection to go back to a previous menu and making another selection. In addition, a "Menu" selection is provided by the PN 200, which allows the user to activate the menu

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hierarchy from the top. In this way, the user can go all the way back to the beginning and begin a new sequence of function selections and submenu displays (column 7, lines 58-67) corresponding to wherein executing the stored sequence commands the consumer electronic device to display the last screen that was displayed when the sequence of user activations was sensed.

As for claim 65, Croy et al. teach The PN 200 includes a selection for invoking a "Back" function, which causes the PN 200 to redisplay a previous submenu. In this manner, the user may "undo" a current selection by using the "Back" selection to go back to a previous menu and making another selection. In addition, a "Menu" selection is provided by the PN 200, which allows the user to activate the menu hierarchy from the top. In this way, the user can go all the way back to the beginning and begin a new sequence of function selections and submenu displays (column 7, lines 58-67) corresponding to wherein the instructions further perform the step of identifying the start and end points of the sequence.

As for claim 67, Croy et al teach a list of programs corresponding to the user selection that is displayed and processing flow loops back to the processing block 410 where microcontroller 220 waits for the next user function key activation (column 11, lines 17-21) corresponding to wherein the instructions further perform the step of preventing memory overflow.

As to claims 66, 70-72, Croy et al. teach a user may simply press recall and MUSIC to receive a list of programs that meet these particular qualifiers according to the preselected user preferences (column 18, lines 44-47) corresponding to wherein



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activation of a single key allows a user to execute the stored sequence and wherein storing the sequence occurs in response to activating a predetermined key and wherein activation of the predetermined key also allows a user to execute the stored sequence.

As to claim 73, Croy et al. teach the transmission data can be two-way (both the base station 100 and the remote device 200 have IR transmitters and IR receivers (column 4, lines 15-19) corresponding to a bi-directional communication system; a microcontroller Fig.2 (220) corresponding to a processor connected to the communication system; and a list of program(s) corresponding to the user selections is displayed and processing flow loops back to processing block 410 where microcontroller 220 waits for the next user function key activation (column 11, lines 17-21) and a flow diagram illustrates a processing logic performed with a remote device 200 when a function key 230 is activated. In processing block 410, microcontroller 220 waits for user interaction with one of the function keys 230. When a user presses one of the function keys 230, microcontroller 220 receives the key activation in processing block 415. For example, the user may have entered a key activation corresponding to a "type" menu item. In processing block 420, microcontroller 220 scans the function key matrix 230 either directly or indirectly through a specialized integrated circuit (column 10, lines 53-63) corresponding to programming operable with the processor and the bi-directional communication system for receiving data from the player used to define navigation commands that are transmittable to the player for controlling navigation within the menu system and for storing a sequence of the navigation commands for subsequent transmission to the player.

As for claims 74 and 75, Croy et al. teach Remote device 200 includes a base station interface 210 for receiving and transmitting data with the base station 100. As described above, base station interface 210 may be a conventional IR or RF wireless data interface or a conventional hard-wired data connection. Data received by remote device 200 via base station interface 210 is fed to microcomputer 220 within remote device 200. Microcomputer 220 may then store this information in memory 222. Memory 222 may be a conventional dynamic random access memory (DRAM), a static random access memory (SRAM), or a non-volatile form of memory such as flash memory or battery-backed CMOS memory (column 5, lines 3-15) and a list of program(s) corresponding to the user selections is displayed and processing flow loops back to processing block 410 where microcontroller 220 waits for the next user function key activation (column 11, lines 17-21) corresponding to wherein the programming is adapted to process preprogrammed sequences of data transmitted by the player and wherein the programming is adapted to define a plurality of keys based upon the data received from the player.

### ***Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 51, 54, 64, 68 and 69 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 6,040,829 ("Croy et al.") in view of U.S. Patent #. 6,289,165 ("Abecassis")

As for claim 51 and 54, 64, Croy et al. teach a remote device Fig.2 (200) corresponding to a remote control and a memory 222 corresponding to the storing means. Accordingly, Croy et al. teach all the claimed limitations as recited in claims 51, 54, and 64 with the exception of providing inter-key pause times. However, Abecassis teaches the computing and storage capabilities of multimedia player, a voice response subsystem option accommodating at least the few commands, such as play, stop (pause), required to control the basic operations can additionally be provided (column 9, lines 12-16) corresponding to the inter-key pause times. It would have been obvious to utilize the pause key as taught by Abecassis in the remote device disclosed by Croy et al. because this would provide a video's foreground and background audio elements to provide audio during a video pause.

As for claims 68 and 69, Abecassis teaches a remote control 200 that has a DVD mode (Fig.2) corresponding to the remote control is operable with a digital video disc player and the instructions further perform the step of determining if the remote control is a DVD mode.

### ***Response to Amendment***

7. Applicant's arguments filed April 1, 2005 have been fully considered but they are not persuasive. The applicant argued that the Applicant asserted that Croy fails to disclose, teach, or suggest monitoring activations of the keys and automatically storing

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a sequence of activations of the keys including the navigation keys while the keys are being concurrently activated to transmit command codes to navigate the menu of the digital media. Examiner disagrees with the applicant because the prior art, Croy, teaches microcontroller 220 performs a lookup to determine the current mode and status corresponding to the depressed key using internal tables stored in memory 222. Using these tables, microcontroller 220 identifies a next step to perform in response to the key depression. For example, microcontroller 220 may display a submenu on the opposite side of the screen display on display device 240. This submenu would correspond to the menu item selected by the user (column 11, lines 1-8) corresponding to monitoring activations of the keys and automatically storing a sequence of activations of the keys including the navigation keys while the keys are being concurrently activated to transmit command codes to navigate the menu of the digital media, except for the underlying part because it is considered as new matter. There is not enablement of the underlying part in the specification. The applicant argued that Croy does not mention nor does Croy infer that commands are transmitted from the remote control to a controlled device while the user is interacting with the locally displayed menu in this programming mode. Examiner disagrees with the applicant because the prior art teaches microcontroller 220 waits for user interaction with one of the function keys 230. When a user presses one of the function keys 230, microcontroller 220 receives the key activation in processing block 415 (column 10, lines 56-59). The above limitation "the user is interacting with the locally displayed menu in this programming mode" that the applicant mentioned the prior art does not teach, was not even mentioned in any of the

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claim. The applicant respectfully questions how a "marked program" in a locally displayed menu can be said to correspond to a "non-navigation key" which is activated as part of a sequence used to transmit command codes to a consumer electronic device for the purpose of navigating a digital media on that consumer electronic device.

Examiner disagrees with the applicant because the prior art teach the present invention also includes a "Mark" function that allows the user to mark particular programs and to be reminded of the imminent broadcast of a marked program or programs. This feature is described in more detail below in connection with FIGS. 44-46 where the marked program is just a reminder or "non-navigation key". The Applicant additionally takes this opportunity to question how the voice response subsystem of Abecassis which accommodates commands such as play, stop, and pause can be said to correspond to the claimed means for storing inter-pause key times, i.e., the time between actuations of keys in a sequence. More specifically, the Applicant respectfully submits that a voice response subsystem functions, by definition, to use voice input for the purpose of eliminating the actuation of keys and, therefore, inter-key pause times could never even arise for the simple reason that keys are never actuated. Examiner disagrees with the applicant comments because there is a inter-pause key times when commands such as play, stop and pause are activated one after another. The applicant argues that Croy fails to disclose the claimed "programming...for receiving data from the player used to define navigation commands that are transmittable to the player for controlling navigation within the menu system (of the media player) and for storing a sequence of the navigation command for subsequent transmission to the player." Examiner

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disagrees with the applicant because the prior art teaches a set of menu displays illustrate the operation of the present invention for saving an often used course of selection or for storing personal preferences. As an initial step to invoke this functionality, the user selects menu item 3810 using function key 3805. The result of this user action is illustrated in FIG. 39. The save function allows a user to record a sequence of user function key activations and associate a name with the particular sequence of actions. Once a user has performed the selection process, such as the selection of a particular personal preference, one single time and named the sequence of selections, e.g., MUSIC, the user may simply press "Recall" and "MUSIC" to receive a list of programs that meet these particular qualifiers according to the preselected user preferences. As described below, the user can delete a personal preference not needed any longer (column 18, lines 33-48). Therefore, the rejection is maintained.

### Conclusion

**8. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard, can be reached on (571) 272-7603.

**Any response to this action should be mailed to:**

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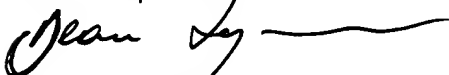
**or faxed to:**

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

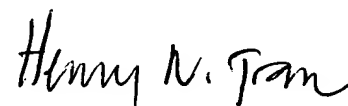
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



Date 6/11/2005

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**HENRY N. TRAN**  
**PRIMARY EXAMINER**